

SAND, GRAVEL, AND STONE SITE PHASE II  
ADMINISTRATIVE RECORD FILE \* \*\*  
INDEX OF DOCUMENTS

I. SITE IDENTIFICATION

1. Volatile Organics Analysis Form for Sample Number  
051385EWD-003, 5/21/85. P. 100001-100001.
2. Organic Analysis Report Form for Sample Number  
051385EWD-003, 5/30/85. P. 100002-100002.

\* Administrative Record File available 6/16/89, updated  
5/14/90, updated 10/29/90.

\*\* For further documentation on the site, please refer to the  
Sand, Gravel and Stone Site Phase I Administrative Record  
File.

Note: Company or organizational affiliation is identified in  
the index only when it appears in the file.

## II. REMEDIAL ENFORCEMENT PLANNING

1. Administrative Order On Consent In The Matter Of: Sand, Gravel and Stone Site, Elkton, Maryland, 1/16/86. P. 200001-200032.
2. Order On Consent In The Matter Of: Sand, Gravel and Stone Site, Elkton, Maryland, 6/13/86. P. 200033-200034.
3. Letter to All Respondents from Ms. Heather Winett, U.S. EPA, re: Transmittal of the certified copy of the executed Amendment to the Work Plan and the certified copy of the executed Amended Caption (#2), 2/5/87. P. 200035-200037.
4. Amendment to Work Plan In The Matter Of: Sand, Gravel and Stone Site, Elkton, Maryland, 2/2/87. P. 200038-200059.
5. Telecopier Transmittal sheet to Mr. Peter Ludzia, U.S. EPA, from Mr. Michael Dore and Mr. George Murray, Clean Sites, re: Administrative Consent Order and demand for dispute resolution, 5/15/90. The letter is attached. P. 200060-200061.
6. Letter to Mr. Peter Ludzia, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher and Boylan, re: Re-transmittal of Demand for Dispute Resolution, 5/25/90. P. 200062-200063.
7. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher, and Boylan, from Ms. Lydia Isales, U.S. EPA, re: Meeting of Steering committee with Abraham Ferdas in Thomas Voltaggio's absence, 5/29/90. P. 200064-200064.
8. Letter to Mr. Michael Dore, Lowerstein [sic], Sandler, Kohl, Fisher and Boylan, from Ms. Lydia Isales, U.S. EPA, re: Availability of Thomas Voltaggio for a meeting, 6/5/90. P. 200065-200065.
9. Letter to Mr. Michael Dore, Lowerstein [sic], Sandler, Kohl, Fisher and Boylan, from Ms. Lydia Isales, U.S. EPA, re: Confirmation of meeting between Steering Committee representative and EPA, 6/12/90. P. 200066-200066.

10. Letter to Ms. Lydia Isales, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher, and Boylan, re: EPA's "arbitrary and capricious conduct", 6/15/90. P. 200067-200071.
11. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher and Boylan, from Ms. Lydia Isales, U.S. EPA, re: EPA's disagreement about Respondent's position on EPA's conduct, 5/30/90. P. 200072-200073.

### III. REMEDIAL RESPONSE PLANNING

1. Report: Geophysical Investigations, Elkton Sand, Gravel and Stone Site, Cecil County, Maryland, prepared by Dunn Geoscience Corporation, 9/26/84. P. 30001-300051.
2. Letter to Mr. Robert Stecik, NUS Corporation, from Advanced Engineering & Planning Corp., Inc., re: Prioritization of Remedial Investigation/Feasibility Study Task for the Elkton MD site, 8/27/85. P. 300052-300052.
3. Report: Quality Assurance Plan For Preliminary Soil Sampling and Geophysical Measurements, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 12/2/85. P. 300053-300069.
4. Letter to Mr. William Cawley, U.S. EPA, from Mr. Kevin Hoogerhyde, Enviresponse, Inc., re: Summary of QA/QC procedures for performing volatile organic and metal analysis, 12/03/85. P. 300070-300070.
5. Report: Field Health and Safety Plan, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 12/3/85. P. 300071-300160.
6. Report: Quality Assurance Plan for Surface Soil Borings and Shallow Well Installation, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 12/9/85. P. 300161-300179.
7. Letter to Mr. Bill Cawley, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Transmittal of the Health and Safety Plan, a boring location map and a project schedule, 12/27/85. P. 300180-300182. The boring location map and a project schedule are attached.
8. Letter to Ms. Patricia Krantz, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Transmittal of the Quality Assurance Plan for Surface Water, Sediment, and Waste Sampling, prepared by Dames & Moore, 1/6/86. P. 300183-300216. The plan is attached. References are listed on P. 300216-300216.
9. Letter to Mr. Harold Byer, U.S. EPA, from Andrew Frebowitz, NUS Corporation, re: Status Report of Sampling for the Maryland Sand, Gravel, and Stone Site, 1/9/86. P. 300217-300218.

10. Memorandum to Mr. James Seif, U.S. EPA, from Mr. Stephen Wassersug, U.S. EPA, re: Endangerment Assessment For the Sand, Gravel and Stone Site, 1/13/86. P. 300219-300226.
11. Letter to Ms. Patricia Krantz, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Transmittal of the Quality Assurance Plan for Deep Soil and Bedrock Borings, Well Installation, and Aquifer Testing, prepared by Dames & Moore, 1/14/86. P. 300227-300268. The plan is attached.
12. Letter to Ms. Patricia Krantz, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Transmittal of maps for the Maryland Sand, Gravel and Stone Site, 1/22/86. P. 300269-300271. The maps are enclosed.
13. Letter to Mr. William Cawley, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Transmittal of the Magnetic Survey at the Maryland Site, prepared by Geosight, 2/3/86. P. 300272-300277. The survey is attached.
14. Letter to Mr. Bill Cawley, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Deviations from Work Plan on shallow well installation, 2/14/86. P. 300278-300294. Field drilling records are attached.
15. Letter to Mr. Bill Cawley, U.S. EPA, from Mr. Mark McBride, Dames & Moore, re: Transmittal of an article entitled "Preliminary Assessment of Laboratory Techniques For Measurement of Volatiles through soils at Hazardous Waste Sites, 2/14/86. P. 300295-300305. The article is attached
16. Progress Report No. 7 of the Maryland Sand, Gravel and Stone Site, Phase II, RI/FS, 2/21/86. P. 300306-300307.
17. Report: Draft Work Plan, Phase II RI/FS Program for the Sand, Gravel, and Stone Site, 2/27/86, (no author cited). P. 300308-300326.
18. Letter to Mr. William Cawley, U.S. EPA, from Mr. H.S. Gill, Dames & Moore, re: Request for a 60 day extension in the scheduled draft work plan, 3/5/86. P. 300327-300328.

19. Letter to Mr. William Cawley, U.S. EPA, from Mr. H.S. Gill, Dames & Moore, re: Request for a revision in the draft work plan, 3/5/86. P. 300329-300332. Two Federal Express receipts are attached.
20. Report: Contract Laboratory Program, Volatile Organic Analysis, (no author cited), 3/5/86. P. 300333-300337.
21. Report: EPA Mobile Laboratory, Volatile Organic Analysis, (no author cited), 3/5/86. P. 300338-300356.
22. Report: Phase II RI/FS For the Sand, Gravel and Stone Site Project Review, prepared by Dames & Moore, 3/13/86. P. 300357-300448.
23. Letter to Mr. Bill Cawley, U.S. EPA, from Mr. Paul Krueger, The BOC Group, re: Transmittal of a Progress Report on the Maryland Site from the period of February 15, 1986 through March 14, 1986, 3/27/86. P. 300449-300461. The report is attached.
24. Report: Proposed Modifications to the Work Plan, Phase II RI/FS Program for the Sand, Gravel and Stone Site, prepared by Dames & Moore, 4/3/86. P. 300462-300480.
25. Letter to Ms. Patricia Krantz, U.S. EPA, from Ms. Surya Prasad, Dames & Moore, re: Transmittal of the revised Quality Assurance Plan for Surface Water Sediment and Solid Waste Sampling at the Maryland Site, prepared by Dames & Moore, 4/20/86. P. 300481-300519. The plan is attached. References are listed on P. 300519.
26. Letter to Ms. Patricia Krantz, U.S. EPA, from Ms. Surya Prasad, Dames & Moore, re: Transmittal of the Quality Assurance Plan for Groundwater Investigation, prepared by Dames & Moore, 5/16/86. P. 300520-300576. The plan is attached.
27. Letter to Mr. William Cawley, U.S. EPA, from Mr. H.S. Gill, Dames & Moore, re: Supplemental information requested for the use of a Becker Hammer Drill, 5/22/86. P. 300577-300580.
28. Letter to Mr. Dennis Carney, U.S. EPA, from Mr. John Koontz, Maryland Department of Health and Mental Hygiene, re: The proposed changes in the Work Plan for the Phase II RI/FS Program, 7/16/86. P. 300581-300581.

29. Report: Revisions to Project Operations Plan-Maryland Sand, Gravel, and Stone Site, Elkton, Cecil County, Maryland, prepared by Dames & Moore, 8/22/86. P. 300582-300588.
30. Report: Quality Assurance Plan for Deep Soil and Bedrock Borings, Well Installation and Aquifer Testing - Maryland Sand, Gravel and Stone Site, Elkton, Maryland, Cecil County, Maryland, Volume 1 of 3, prepared by Dames & Moore, 8/22/86. P. 300589-300640.
31. Report: Quality Assurance Plan for Surface Water, Sediment and Groundwater investigations - Maryland Site, Elkton, Cecil County, Volume 2 of 3, prepared by Dames & Moore, 8/22/86. P. 300641-300727.
32. Report: Standard Operating Procedures Fields Operations - Maryland Sand, Gravel, and Stone Site, Elkton, Cecil County, Maryland, Volume 3 of 3, prepared by Dames & Moore, 8/22/86. P. 300728-300826.
33. Letter to Mr. William Cawley, U.S. EPA, from Dr. Paul Krueger, The BOC Group, re: Transmittal of revised Schedules For Chapter 4 of the Phase II, RI/FS, 9/19/86. P. 300827-300829.
34. Letter to all respondents, from Ms. Heather Winett, U.S. EPA, re: An Amendment to the Work Plan, 11/24/86. P. 300380-300834. A list of respondents of CERCLA Section 106 Consent Order RI/FS and a letter regarding observations made at the site are attached.
35. Letter to Dr. Paul Krueger, The BOC Group, from Mr. Dennis Carney, U.S. EPA, re: Meeting that was held to discuss the Phase II RI/FS impacts from SARA, 3/30/87. P. 300836-300839. The minutes of the meeting and a site map are attached.
36. Letter to Mr. William Cawley, U.S. EPA, and Mr. David Healy, Maryland Waste Management Administration, from Mr. John C. Kittridge, Dames & Moore, re: Summary of Site Visit, 6/29/87. P. 300840-300843.
37. Memorandum to Mr. William Cawley, U.S. EPA, from Ms. Patricia Krantz, U.S. EPA, re: Comparative Data Review

for Maryland Site, 8/4/87. P. 300844-300845. The data for Sample Numbers CD013, CD015, CD042 and CD043 are attached.

38. Letter to Mr. William Cawley, U.S. EPA, from Dr. Paul Krueger, The BOC Group, re: Transmittal of the Progress Report No. 19 for the Maryland Sand, Gravel and Stone Site, 8/14/87. P. 300846-300847. The Progress Report is attached.
39. Letter to Mr. David Keehn, Air Products and Chemicals, Inc., from Mr. Dennis Carney, U.S. EPA, re: Applicable or Relevant and Appropriate Requirements (ARARS) for the ground water conditions at the Maryland Site, 10/13/87. P. 300848-300853. The ARARs are attached.
40. Transmittal Sheet to Ms. Galena Bendersky, U.S. EPA, from Mr. Bill Adams, Dames & Moore, re: The selection of a location for Well D&M-13, 10/14/87. P. 300854-300855.
41. Letter to Dr. Paul Krueger, The BOC Group, from Mr. Dennis Carney, U.S.EPA, re: Location of the new Deep Monitoring Well No. 13, 10/20/87. P. 300856-300856.
42. Letter to Mr. Dennis Carney, U.S. EPA, from Dr. Paul Krueger, The BOC Group, re: Concerns over the ARAR levels, 10/29/87. P. 300857-300859.
43. Report: Inorganic Analysis Data Package, prepared by Compuchem, 11/12/87. P. 300860-300912. The analytical data sheets for Sample Numbers OSW2, OSW3, OSW4, OSW5, OSW6, OSW7, FB-02, SW-02, SW-07, SW-08, FB-07, OSW-2MS, OSW-2MSD, SED-07, SED-08, FB-09, SED-02, SED-05, SED-06, D-M-11, FB-03, OSW-08, OSW-09, TB-03, TB-05, D-M-11MS and D-M-11MSD.
44. Letter to Ms. Galina Bendersky, U.S. EPA, from Dr. Paul Krueger, The BOC Group, re: Transmittal of the Progress Report, No. 23 for the Maryland Site, 12/11/87. P. 300913-300915. The report is attached.
45. Transmittal Sheet to Ms. Galina Bendersky, U.S.EPA, from Dr. Paul Krueger, The BOC Group, re: Proposed Modifications to Dump Tests at MSG&S Site, 12/11/87. P. 300916-300923. The following are attached:



- a) a memorandum regarding the MSGS Aquifer Test recommendations;
  - b) a data sheet summarizing the values for selected wells;
  - c) a summary table of time required to pump wells dry;
  - d) a Progress Report of Phase II RI/FS.
46. Letter to Ms. Galina Bendersky, U.S. EPA, from Dr. Paul Krueger, The BOC Group, re: Reasons for delay in completion of the field work on the MSGS site, 12/11/87. P. 300924-300934. The following are attached:
- a) a memorandum regarding items causing unavoidable delays on MSGS Project;
  - b) a letter regarding a two week delay in delivery of sample results;
  - c) a report entitled "Changes to the EPA's Organic Statement of Work (SOW) for the Contract Laboratory Program";
  - d) a letter regarding an anticipated two (2) week delay.
47. Letter to Ms. Grace Wood, Dames & Moore, from Ms. Mary Mitchell, CompuChem Laboratories, re: Transmittal of analytical work results for Sample Numbers DMW-02, FB-06, SMW-01, SMW-12, SMW-22, SMW-24, FB-17, RGW-01, FB-20, RGW-02, D&M-04, D&M-08, SMW-02, FB-18, D&M-03, FB-19, RGW-03, SMW-10, D&M-13 and SMW-18, 12/18/87. P. 300935-300960.
48. Letter to Ms. Grace Wood, Dames & Moore, from Ms. Mary Mitchell, CompuChem, re: Results of analytical work for Sample Numbers DMW-02, FB-06, TB-08, D&M-02, SMW-12, SMW-22, SMW-24, FB-17, TB-11, RGW-01, RGW-02, D&M-04, SMW-02, TB-12, FB-18, DEM-03, FB-19 and RGW-03, 12/23/87. P. 300961-301101.

49. Letter to Ms. Grace Wood, Dames & Moore, from Ms. Mary Mitchell, CompuChem Laboratories, re: Analytical results of soil samples, 1/14/88. P. 301102-301117. The analytical data sheets for Sample Numbers SED-01, SED-01MS and SED-01MSD are attached.
50. Letter to Ms. Grace Wood, Dames & Moore, from Ms. Mary Mitchell, CompuChem Laboratories, re: Analytical results of soil samples, 1/14/88. P. 301118-301690. The following are attached:
- a) Analytical data sheets for Sample Numbers SED-03, SED-03MS, SED-03MSD, SED-04, SED-04MS, SED04MSD, FB-12, SED-02, SED-05, SED-06, SED-07, SED-08, SED-05MS, SED-05MSD, SED-02MS, SED-02MSD, SMW-06, D-M-09, FB-16, TB-10, SMW-06MS, SMW-06MSD, D&M-11, OSW-09, OSU-08, FB-03, SW-01, D&M-07, FB-04, FB-08, SW-03, SW-04, SW-09, FB-11, OSW-01, DMW-03, RGW-04, FB-14, FB-13, D&M-06, D&M-10, FB-15, D&M-09, FB-16, D-M-05, D-M-12, FB-05, TB-07, DM-05MS, DM-05MSD, FB-07, SW-02, SW-07, SW-08, TB-02, SW-07MS, SW-07MSD, FB-07, SW-02MS, SW-02MSD, VBLK1104, VBLK1105, SBLK162945, SMW-10, TB-13, DM-13, SMW-18, SMW-18DL, FB-20, TB-14, DM-13MS, DM-13MSD, VBLK1124, VBLK1125, VBLK1126, TB-04, DM-07, OSW-1, DMW-03, RGW-04, TB-06, FB-13, DM-06, DM-10, FB-15, TB-09, SW-01MS, SW-01MSD, SW-01MSRE, SW-01MSDRE, FB-08, FB-11, FB-08MS, FB-08MSD, VBLK1110, VBLK1111, VBLK1112, VBLK1118, SBLK163274, SBLK164449, SBLK163981 and PBLK;
  - b) boring logs for soils and wells, and geophysical logs for wells.
51. Letter to Ms. Lydia Isales, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, re: EPA suggestion to install additional monitoring wells, 1/29/88. P. 301691-301692.

52. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, from Ms. Lydia Isales, U.S. EPA, re: Clarification of issues concerning additional well installation, 2/3/88. P. 301693-301694.
53. Report: Draft Phase II Remedial Investigation for the Maryland Sand, Gravel, and Stone Site, prepared by Dames & Moore, 2/16/88. P. 301695-302111.
54. Letter to Ms. Lydia Isales, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, re: Mr. Dore's and Dr. Krueger's disagreements with U.S. EPA statements in a previous letter, 2/23/88. P. 302112-302114.
55. Memorandum to Mr. Chris Corbett, U.S. EPA, from Dr. Bruce Molholt, U.S. EPA, re: Comments on risk assessment sections of the Dames & Moore draft Remedial Investigation, 2/26/88. P. 302115-302116.
56. Letter to Dr. Paul C. Krueger, The BOC Group, from Mr. Christopher J. Corbett, U.S. EPA, re: Transmittal of the EPA memorandum from Mr. Bruce Molholt to Mr. Corbett, 2/26/88. P. 302117-302119. A memorandum regarding risk assessment sections of the draft Remedial Investigation is attached.
57. Letter to Dr. Paul C. Krueger, the BOC Group, from Mr. Christopher J. Corbett, U.S. EPA, re: Reiteration of a request for a proposal to construct additional monitoring wells to fully characterize the bedrock aquifer, 3/1/88. P. 302120-302120.
58. Letter to Mr. Christopher J. Corbett, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group re: Confirmation of agreement to delay additional well proposals pending legal and technical clarification from U.S. EPA, 3/10/88. P. 302121-302123.
59. Letter to Dr. Paul C. Krueger, The BOC Group, from Mr. Christopher J. Corbett, U.S. EPA, re: Clarification of requirements for additional well proposals, 3/15/88. P. 302124-302125.
60. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, from Ms. Lydia Isales, U.S. EPA, re:

Reiteration of U.S. EPA's position on additional monitoring wells, 3/17/88. P. 302126-302126.

61. Letter to Dr. Paul C. Krueger, the BOC Group, from Mr. Christopher J. Corbett, U.S. EPA, re: Explanation of EPA position on additional monitoring wells and request for decision, 3/23/88. P. 302127-302128.
62. Letter to Mr Christopher J. Corbett, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Confusion regarding previous correspondence, 3/24/88. P. 302129-302129.
63. Letter to Ms. Paula Luborsky, U.S. EPA, from Mr. John C. Kittridge, Dames & Moore, re: Submittal of field data for the Slug Tests contained in the Draft Phase II Remedial Investigation, 3/29/88. P. 302130-302149.  
The following are attached:
  - a) a Table 5-3 from the Phase II RI;
  - b) a Handwritten field date report;
  - c) a photocopy of the Department of the Navy Soil Mechanics Design Manual 7.1, p. 7.1-103 to 7.1-108.
64. Letter to Mr. Christopher J. Corbett, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Proposal for a compromise concerning additional monitoring wells, 4/5/88. P. 302150-302153.
65. Report: Draft Phase II Feasibility Study for Maryland Sand, Gravel, and Stone Site, prepared by Dames & Moore, 4/7/88. P. 302154-302238. References are listed on P. 302237-302238.
66. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of The Environment, re: Transmittal of comments of the Maryland Hazardous and Solid Waste Management Administration (HSWMA), 4/20/88. P. 302239-302246.  
The comments of the HSWMA are attached.
67. Letter to Dr. Paul C. Krueger, The BOC Group, from Mr. Christopher J. Corbett, U.S. EPA, re: Suggestion of compromise on details of additional monitoring wells, 4/22/88. P. 302247-302253. Handwritten notes regarding the text of the letter are attached.

68. Letter to Mr. Christopher J. Corbett, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: PRP Technical Committee's proposal for procedure regarding additional bedrock wells, 4/28/88. P. 302254-302256.
69. Letter to Dr. Paul C. Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: Acceptance of proposal for installation of additional bedrock wells, 5/12/88. P. 302257-302257.
70. Letter to Dr. Paul C. Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: Transmittal of U.S. EPA and State of Maryland comments on the Phase II Remedial Investigation/Feasibility Study, 5/19/88. P. 302258-302272. The comments are attached.
71. Memorandum to addressees from Mr. Douglas Ammon, Clean Sites Inc., re: Agenda for meeting and site visit, and workplan for installation of additional bedrock wells, 6/6/88. P. 302273-302282. An agenda for the June 10 site visit and a workplan for the additional bedrock wells, Version 1.0. are attached.
72. Handwritten notes by Ms. Sharon Feldstein, U.S. EPA, re: June 10, 1988 PRP steering committee, 6/10/88. P. 302283-302285.
73. Letter to Dr. Paul Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: EPA and State of Maryland questions concerning the proposed workplan for additional bedrock wells, 6/17/88. P. 302286-302288.
74. Record of Communication to Ms. Sharon Feldstein, U.S. EPA, from Mr. Doug Ammon, Clean Sites Inc., re: Details on bedrock well installation, 6/30/88. P. 302289-302290. A record of communication regarding site bioassessment is attached.
75. Memorandum to Ms. Sharon Feldstein, U.S. EPA, from Mr. Douglas Ammon, Clean Sites Inc., re: Transmittal of Workplan Version 2.0 and the names and qualifications of potential hydrogeologists, 7/1/88. P. 302291-302309. The following are attached:
  - a) a Workplan for Additional Bedrock Wells at Maryland Sand, Gravel & Stone Site, Version 2.0;

- b) a Statement of Qualifications for Mr. William D. Adams, Mr. James V. Tracy, and Mr. Mark S. McBride.
76. Record of Communication to Ms. Sharon Feldstein, U.S. EPA, from Mr. Bill Cahill, re: Qualification of well drillers, and a citizen's complaint about signs, 7/1/88. P. 302310-302310.
77. Record of Communication to Mr. Dave Healy and Mr. Bill Cahill, Maryland Hazardous and Solid Waste Management Administration, from Ms. Sharon Feldstein, U.S. EPA, re: Licensing requirements for drillers, 7/7/88. P. 302311-302311.
78. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, from Ms. Lydia Isales, U.S. EPA, re: Scheduling problems with installation of bedrock wells, 7/18/88. P. 302312-302312.
79. Letter to Ms. Sharon Feldstein, U.S. EPA, from Mr. Paul C. Krueger, The BOC Group, re: Transmittal of Dames & Moore's reply to U.S. EPA's and State of Maryland's comments on the Phase II Remedial Investigation/Feasibility Study draft, 7/21/88. P. 302313-302350. The comments from Dames & Moore are attached.
80. Letter to Dr. Paul Krueger, The Boc Group, from Ms. Sharon Feldstein, U.S. EPA, re: Approval of Workplan Version 2.0 with modifications, 7/22/88. P. 302351-302351.
81. Record of Communication to Mr. Lowell Leach, Robert S. Kerr Laboratory, from Ms. Sharon Feldstein, U.S. EPA, re: Geochemistry details of sitework, 7/23/88. P. 302352-302352.
82. Handwritten notes, re: Remedial Investigation comments review meeting, 7/26/88. P. 302353-302355. A handwritten schedule for site work is attached.
83. Record of Communication to Mr. Lowell Leach from Ms. Sharon Feldstein, U.S. EPA, re: Problems encountered at site wells, 7/26/88. P. 302356-302356.

84. Record of Communication to Technical Assistance, Johnson Screens, from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 7/27/87. P. 302357-302357.
85. Record of Communication to Mr. Doug Ammon, Clean Sites Inc., from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 7/29/88. P. 302358-302358.
86. Record of Communication to Dames & Moore from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction 8/3/88. P. 302359-302359.
87. Record of Communication to Mr. Jim Tracey, Clean Sites Inc., from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 8/3/88. P. 302360-302360.
88. Record of Communication to Dr. Paul Krueger, Mr. Jim Tracey, and Mr. Doug Ammon, from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 8/10/88. P. 302361-302361.
89. Record of Communication to Mr. Chris Carlson from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 8/10/88. P. 302362-302368. An unreferenced textual explanation of technical details is attached.
90. Record of Communication to Mr. Bill Adams from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 8/10/88. P. 302369-302369.
91. Record of Communication to Mr. Bill Cahill from Ms. Sharon Feldstein, U.S. EPA, re: Report on well installation, 8/10/88. P. 302370-302370.
92. Letter to Dr. Paul C. Krueger, The BOC Group, from Mr. Frank Henderson, Maryland Department of the Environment, re: Clarification of revisions to be added to the draft Phase II Remedial Investigation/ Feasibility Study, 8/10/88. P. 302371-302375. A summary of the history of the Maryland Sand and Gravel Site is attached.
93. Letter to Dr. Paul Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: Transmittal of EPA comments on Dames & Moore comments on the Phase II Remedial Investigation, 8/11/88. P. 302376-302376.

94. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul Krueger, The BOC Group, re: Transmittal of the Dames & Moore's reply to U.S. EPA's comments on Phase II Remedial Investigation/Feasibility Study Draft Reports for Maryland Sand, Gravel and Stone Site, 7/21/88. P. 302377-302415. The responses to the comments are attached.
95. Record of Communication to Ms. Sharon Feldstein, U.S. EPA, from Mr. Doug Ammon, re: Report on site drilling operations, 8/12/88. P. 302416-302416.
96. Record of Communication to Ms. Sharon Feldstein, U.S. EPA, from Mr. Bill Cahill, re: Report on site drilling operations, 8/12/88. P. 302417-302417.
97. Record of Communication to Mr. Patrick Longmire, Weston Inc., from Ms. Sharon Feldstein, U.S. EPA, re: Site well construction, 8/16/88. P. 302418-302418.
98. Record of Communication to File from Ms. Sharon Feldstein, U.S. EPA, re: Observation of bedrock well installation, 8/18/88. P. 302419-302419.
99. Record of Communication to File from Ms. Sharon Feldstein, U.S. EPA, re: Observation of site drilling procedures, 8/18/88. P. 302419a-302419a.
100. Memorandum to Ms. Sharon Feldstein, U.S. EPA, from Mr. Thomas Buntin, U.S. EPA, re: Review of Phase II hydrogeologic Investigation Report, 8/18/88. P. 302420-302422.
101. Letter to Ms. Sharon Feldstein, U.S. EPA, and Mr. David Healy, Maryland Hazardous and Solid Waste Management Administration, from Mr. John C. Kittridge, Dames & Moore, re: Transmittal of responses to comments on the Phase II draft Remedial Investigation/Feasibility Study, 8/19/88. P. 302423-302465. The responses to the comments are attached.
102. Letter to Ms. Sharon Feldstein, U.S. EPA, and Mr. David A. Healy, Maryland Hazardous and Solid Waste Management Administration, from Mr. John C. Kittridge, Dames & Moore, re: Proposed Schedule for Supplemental Studies and Final Phase II Remedial Investigation, 8/19/88.



- P. 302466-302467. The Schedule is attached.
103. Record of Communication to Ms. Sharon Feldstein, U.S. EPA, from Mr. Marc McBride re: Maryland Sand, Gravel & Stone Site, 8/23/88. P. 302467a-302467a.
  104. Record of Correspondence to Mr. John Kittridge from Ms. Sharon Feldstein, U.S. EPA, re: Site well installation, 8/26/88. P. 302468-302468.
  105. Handwritten notes by Ms. Sharon Feldstein, U.S. EPA, re: Conference call, 8/31/88. P. 302469-302473.
  106. Letter to Ms. Sharon Feldstein, U.S. EPA, and Mr. David A. Healy, Maryland Hazardous and Solid Waste Management Administration, from Mr. John C. Kittridge, Dames & Moore, re: Transmittal of revised sections of the Phase II draft Remedial Investigation, 9/2/88. P. 302474-302529. The revised sections are attached.
  107. Transmission Sheet to Ms. Sharon Feldstein, U.S. EPA, from Mr. Chris Carlson, Lockheed, re: Transmittal of Site Comments on Chemical Results from the Phase II Report, 9/6/88. P. 302530-302546. The comments are attached.
  108. Letter to Ms. Laura A. Boornazian, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, re: Summary of Potentially Responsible Parties' site activities and discussion of Final Remedial Investigation deadline, 9/9/88. P. 302547-302550.
  109. Transmission Sheet to Ms. Sharon Feldstein, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, re: Transmittal of a letter addressed to Ms. Laura Boornazian, 9/9/88. P. 302551-302555. The letter is attached.
  110. Record of Communication to Mr. John Kittridge, U.S. EPA, from Ms. Sharon Feldstein, U.S. EPA, re: Site drilling operations, 9/13/88. P. 302556-302566.
  111. Letter to Dr. Krueger, The Boc Group, and Mr. Keehn, Air Products & Chemicals, Inc., from Ms. Sharon Feldstein, U.S. EPA, re: Clarification of issues raised at an earlier meeting, 9/13/88. P. 302557-302558.

112. Transmission Sheet to Ms. Sharon Feldstein, U.S. EPA, and Mr. David A. Healy, Maryland Hazardous and Solid Waste Management Administration, from Mr. John C. Kittridge, Dames & Moore, re: Work Plan for installation of additional wells, 9/19/88. P. 302559-302564.
113. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of results of groundwater resampling, 9/19/88. P. 302565-302581. The following are attached:
- a) a letter regarding transmittal of analytical test results;
  - b) a Case Summary Narrative;
  - c) Inorganic Analysis Data Sheets for Sample Numbers D&M-07, D&M-11, BMW-07 and FB-01;
  - d) a letter regarding transmittal of analytical test results;
  - e) a Case Summary Narrative;
  - f) Inorganic Analysis Data Sheets Sample Numbers SMW-10-DMW-03, DMW-03 and FB-03.
114. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of groundwater chemical analyses, 9/20/88. P. 302582-302595. The following are attached:
- a) a letter regarding transmittal of analytical test results;
  - b) a Case Summary Narrative;
  - c) Inorganic Analysis Data results for sample number DMW-07;
  - d) a letter regarding transmittal of analytical tests results;
  - e) a Case Summary Narrative;
  - f) Inorganic Analysis Data Sheets for Sample Numbers FB-02, D&M-03, D&M 5 and D&M 12.

115. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of pH data from monitoring wells, 9/20/88. P. 302596-302600. The data is attached.
116. Letter to Mr. John Kittridge, Dames & Moore, from CompuChem Laboratories, re: Transmittal of sampling results, 9/20/88. P. 302601-302677. The following are attached:
- a) a Case Narrative;
  - b) Organics Analysis Data Sheets for Sample Numbers BMW-07, D&M-03, D&M-07, D&M-11, D&M-12, D&M-5, DMW-02, DMW-02MS, DMW02MSD, DMW-03, SMW-10, SMW-10MS, SMW-10MSD, FB-01, FB-02, FB-03 and TRIPBLANK.
117. Letter to Mr. John Kittridge, Dames & Moore, from CompuChem Laboratories, re: Transmittal of sampling results, 9/21/88. P. 302678-302696. The following are attached:
- a) a Platinum Case Summary Narrative;
  - b) Organics Analysis Data Sheets for Sample Numbers DMW-07, DMW-07RE, DMW-07MS, DMW-07MSD and TRIBLANK.
118. Letter to Dr. Paul Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: Approval of workplan for replacement wells, 9/23/88. P. 302697-302697.
119. Letter to Mr. John Kittridge, Dames & Moore, from Ms. Mary Mitchell, CompuChem Laboratories, re: Transmittal of Sampling results, 9/27/88. P. 302698-302721. The following are attached:
- a) a Case Narrative;
  - b) Organics Analysis Data Sheets Sample Numbers DM-10, DM-10MS, DM-10MSD, DM-13 and LABPURE.
120. Handwritten notes by Ms. Sharon Feldstein, U.S. EPA, re: Maryland Sand, Gravel and Stone meeting, 9/28/88. P. 302722-302729. An attendance list for the meeting and two project schedules for the Remedial Investigation/Feasibility Study.

121. Letter to Mr. John Kittridge, Dames & Moore, from CompuChem, re: Transmittal of sampling results, 9/30/88. P. 302330-302733. The following are attached:
- a) a Case Summary Narrative;
  - b) Inorganic Analysis Data Sheets for Sample Numbers D&M-10 and D&M-13.
122. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of groundwater chemical results, 10/4/88. P. 302734-302735.
123. Letter to Ms. Sharon Feldstein, U.S. EPA, and Mr. David A. Healey, Maryland Hazardous and Solid Waste Administration, from Mr. Douglas C. Ammon, Clean Sites Inc., re: Justification for not resampling specified monitoring wells, 10/6/88. P. 302736-302739. The justification information is attached.
124. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Resubmission of groundwater analysis results, 10/7/88. P. 302740-302740.
125. Letter to Ms. Sharon Feldstein, U.S. EPA, from Mr. John C. Kittridge, Dames & Moore, re: Transmittal of draft report sections for the Phase II Remedial Investigation, 10/21/88. P. 302741-302890. Section 5 and Appendices D, L, and M of the Remedial Investigation Report are attached.
126. Letter to Dr. Paul C. Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: EPA review justification for not re-sampling specified wells, 10/23/88. P. 302891-302891.
127. Letter to Dr. Paul C. Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: EPA comments on selected chapters of the Phase II Remedial Investigation, 10/26/88. P. 302892-302893.
128. Letter to Dr. Paul C. Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: EPA review and

comments of The Phase II Feasibility Study, 11/4/88.  
P. 302894-302896.

129. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of groundwater chemical analyses, 11/7/88. P. 302897-302926. The following are attached:
- a) a letter regarding transmittal of the sample analyses;
  - b) a Platinum Case Narrative;
  - c) Organics Analysis Data Sheets for Sample Numbers DM-7, DM-7RE, DM-14, DM-15, DM-15MS, DM-15MSD, DM-7MS and DM-7MSD.
130. Letter to Ms. Sharon Feldstein, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of groundwater chemical analyses, 11/15/88. P. 302927-302954. The following are attached:
- a) a Transmittal Sheet;
  - b) a Facsimile cover page;
  - c) Organic Analysis Data Sheets for Sample Numbers D&M-06A and D&M-09A;
  - d) a Case Summary Narrative;
  - e) Inorganic Analysis Data Sheets for Sample Numbers DM-15, DM-14, DM-7, DM-6A and DM-9A.
131. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, from Ms. Lydia Isales, U.S. EPA, re: EPA approval of proposed work schedule with specified caveats, 11/18/88. P. 302955-302958. An amendment to Work Plan (#2) in the matter of Sand, Gravel and Stone Site is attached.
132. Report: Draft Final Phase II Remedial Investigation, Maryland Sand, Gravel and Stone Site, Volume --Text, prepared by Dames & Moore, 12/2/88. P. 302959-304196. References are listed on P. 304188-304196.
133. Report: Phase II Remedial Investigation, Laboratory Data Supplement, Maryland Sand, Gravel and Stone Site, Volume 2 of 3, prepared by Dames & Moore, 12/2/88.

- P. 304197-304835.
134. Report: Draft Final Phase II Remedial Investigation, Maryland Sand, Gravel and Stone Site, Volume 2 -- Appendices, prepared by Dames & Moore, 12/2/88. P. 304836-305140.
135. Record of Communication, to Mr. Brad Hilton, AEPCO Inc., from Mr. Peter Ludzia, U.S. EPA, re: Field information on a specified site well, 12/15/88. P. 305141-305144. A telecopy cover sheet and handwritten notes regarding sampling data are attached.
136. Transmission sheet to Ms. Sharon Feldstein, U.S. EPA, and Mr. David Healy, Maryland Hazardous and Solid Waste Management Administration, from John Kittridge, Dames & Moore, re: Letter sent to Ms. Feldstein and Mr. Healy regarding sonic televiewer and TV logs for specified wells, 12/16/88. P. 305145-305147. The letter is attached.
137. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher & Boylan, from Ms. Lydia Isales, U.S. EPA, re: Transmittal of Amendment to Work Plan #2 for the Phase II Remedial Investigation/Feasibility Study, 12/27/88. P. 304148-305152. An Amendment to Work Plan (#2) in the matter of Sand, Gravel and Stone site and a Project Schedule on the RI/FS for Maryland Sand, Gravel and Stone Site are attached.
138. Report: Draft Final Phase II Feasibility Study, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 1/9/89. P. 305153-305269.
139. Memorandum to Mr. Phil Malley, from Mr. Jeff Rosenfeld, re: Review of Phase II Final Report, 1/9/89. P. 305270-305271.
140. Memorandum to Ms. Sharon Feldstein, U.S. EPA, from Mr. Roy L. Smith, U.S. EPA, re: Comments and technical improvements on the Remedial Investigation, 1/9/89. P. 305272-305287. A report on chronic health hazard assessments is attached.
141. Memorandum to Mr. Peter Ludzia, U.S. EPA, from Ms. Sharon Feldstein, U.S. EPA, re: Transmittal of Ms. Feldstein's handwritten comments on the Remedial Investigation, 1/15/89. P. 305288-305298. The handwritten comments are attached.

142. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of the Environment, re: Transmittal of the Maryland Hazardous and Solid Waste Management Administration's comments on Draft Final Phase II Remedial Investigation, 1/23/89. P. 305299-305308. The comments are attached.
143. Handwritten notes by Ms. Sharon Feldstein, U.S. EPA, re: Field Trip Report, 1/25/89. P. 305309-305313. A handwritten attendance list is attached.
144. Routing and Transmittal Slip to Ms. Sharon Feldstein, U.S. EPA, from Mr. Bill Foster, U.S. EPA, re: Comments of Maryland Sand, Gravel and Stone Site, 1/27/89. P. 305314-305316. The comments are attached.
145. Memorandum to Ms. Sharon Feldstein, U.S. EPA, from Mr. Roy L. Smith, U.S. EPA, re: Review of proposed remediation goals, 1/27/89. P. 305317-305318.
146. Transmittal Sheet to Ms. Sharon Feldstein, U.S. EPA, from Mr. John Kittridge and Ms. Lois Weik, Dames & Moore, re: Letter sent to Ms. Feldstein and Mr. David Healey of Maryland Hazardous and Solid Waste Management Administration commenting an additional page to the Draft Final Phase II Feasibility Study, 1/27/89. P. 305319-305321. The letter and the additional page are attached.
147. Transmission Sheet to Ms. Sharon Feldstein, U.S. EPA, from Lockheed, re: Comments on Maryland Sand, Gravel and Stone Site, 2/1/89. P. 305322-305326. The comments are attached.
148. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of the Environment, re: Transmittal of the Maryland Hazardous and Solid Waste Management Administration's comments on the Draft Final Phase II Feasibility Study, 2/9/89. P. 305327-305330. The comments are attached.
149. Letter to Dr. Paul C. Krueger, The BOC Group, from Ms. Sharon Feldstein, U.S. EPA, re: EPA comments on the Draft Final Phase II Remedial Investigation, 2/10/89. P. 305331-305340.

150. Letter to Mr. Abraham Ferdas, U.S. EPA, from Mr. Stephen D. Von Allmen, U.S. Department of Health and Human Services, re: Transmittal of the Preliminary Health Assessment, 2/24/89. P. 305341-305352. The Preliminary Health Assessment is attached.
151. Letter to Mr. David Healy, Maryland Department of The Environment, from Dr. Paul Krueger, The BOC Group, re: Transmittal of documents concerning the site certificate's effective date, 3/3/89. P. 305353-305374. The following are attached:
- a) a letter regarding certificate of approval to Airco Chemicals;
  - b) a letter regarding Airco's interest in a certificate of approval;
  - c) a report entitled, Treatability of Wastewaters from Airco Chemicals and Plastics, Elkton, Maryland Plant;
  - d) a letter regarding biotesting on Airco waste effluent;
  - e) a letter regarding Airco's disposal of waste water;
  - f) a letter regarding Airco's conformity to disposal procedures;
  - g) a handwritten note regarding a Water Resource Administration meeting;
  - h) a roster of attendance to the Water Resource Administration meeting;
  - i) a letter regarding compliance of the subject order.
152. Letter to Ms. Sharon Feldstein, U.S. EPA, and Dr. David Healy, Maryland Department of the Environment, from Mr. John Kittridge, Dames & Moore, re: Transmittal of revision proposals to the Draft Final RI, 3/6/89. P. 305375-305385. The responses to specific U.S. EPA comments on Section 7.0 Public Health and Environmental Concerns are attached.



153. Letter to Ms. Sharon Feldstein, U.S. EPA, and Dr. David Healy, Maryland Department of the Environment, from Mr. John Kittridge, Dames & Moore, re: Transmittal of draft revisions to selected sections of the Draft Final Remedial Investigation, 3/6/89. P. 305386-305461. The revisions are attached.
154. Memorandum to Mr. Peter Ludzia, U.S. EPA, from Mr. Thomas Buntin, re: Review of Draft Final Phase II Feasibility Study, 3/9/89. P. 305462-305366.
155. Letter to Dr. Paul Krueger, The BOC Group, and Mr. David Keehn, Air Products and Chemicals, Inc., from Ms. Sharon Feldstein, U.S. EPA, re: Review and comment of Draft Feasibility Study, 3/14/89. P. 305467-305474. A document setting forth the nine Remedial Evaluation Criteria and two certified mail receipts are attached.
156. Letter to Ms. Sharon Feldstein, U.S. EPA, and Dr. David Healy, Maryland Department of the Environment, from Mr. John Kittridge, Dames & Moore, re: Revised Section 7.0 of the Draft Final RI, 3/20/89. P. 305475-305556. The revisions are attached.
157. Letter to Dr. Paul Krueger, The BOC Group, and Mr. David Keehn, Air Products and Chemicals, Inc., from Ms. Sharon Feldstein, U.S. EPA, re: Comments on the Draft Feasibility Study, 3/28/89. P. 305557-305557.
158. Memorandum to Ms. Sharon Feldstein, U.S. EPA, from Mr. Roy Smith, U.S. EPA, re: Dames & Moore's responses to comments and revisions of the Remedial Investigation, 3/30/89. P. 305558-305559.
159. Memorandum to the File, U.S. EPA, from Ms. Sharon Feldstein, U.S. EPA, re: Well Construction Problems, MSGS, 4/89. P. 305560-305588. The following are attached:
  - a) an article entitled "Absorption and Surface Precipitation of Metals on Amorphous Iron Oxyhydroxide";
  - b) a letter regarding how the PRP's are proceeding with the RI;
  - c) a Record of Communication regarding sampling results;

- d) a Record of Communication regarding the cause of the rise in pH;
  - e) a Record of Communication regarding grout contamination.
- 160. Letter to Dr. Paul Krueger, The BOC Group, from Mr. Frank Henderson, Maryland Department of the Environment, re: The Certificate of Approval issue, 4/4/89. P. 305589-305597. The following are attached:
  - a) a letter regarding an approval of certificate;
  - b) a letter regarding ARAR's for the MSGS;
  - c) a memorandum regarding an update of ARAR.
- 161. Letter to Dr. Paul Krueger, The BOC Group, and Mr. David Keehn, Air Products and Chemicals, Inc., from Mr. Peter Ludzia, U.S. EPA, re: EPA review of the revised chapters for the Remedial Investigation for the Maryland Sand, Gravel and Stone, 4/6/89. P. 305598-305601. A certified mail receipt is attached.
- 162. Memorandum to Mr. Peter Ludzia, from Mr. Mark Noll, re: Comments regarding Maryland Sand, Gravel and Stone Final Phase II FS, 4/9/89. P. 302602-305602.
- 163. Report: Final Phase II Feasibility Study, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 4/13/89. P. 305603-305738. References are listed on P. 305738.
- 164. Record of Communication to Dr. Paul Krueger, from Mr. Peter Ludzia, re: Discussion of reasons for Purging D&M-10 and D&M-13, 4/13/89. P. 305739-305739.
- 165. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of the Environment, re: The review and comments of the Final Phase II Feasibility Study, 5/15/89. P. 305740-305742. The comments are attached.
- 166. Report: Final Phase II Remedial Investigation, Maryland Sand, Gravel and Stone Site, Volume I Text, prepared by Dames & Moore, 5/22/89. P. 305743-305993. References are listed on P. 305985-305993.

167. Report: Final Phase II Remedial Investigation, Maryland Sand, Gravel and Stone Site, Volume 2-Appendices, prepared by Dames & Moore, 5/22/89. P. 305994-306346.
168. Handwritten notes by Ms. Sharon Feldstein, U.S. EPA, re: Meeting held, February 21, 2/21/89. P. 306347-306349.
167. Record of Communication to Mr. Bill Cahill from Ms. Sharon Feldstein, re: Questions concerning state monitoring requirements, 2/22/89. P. 306350-306350.
168. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of the Environment, re: List of Applicable or Relevant and Appropriate Requirements for the Maryland Sand, Gravel and Stone Site, 4/21/89. P. 306351-306352.
169. Letter to Dr. Paul Krueger, The BOC Group, and Mr. David Keehn, Air Products and Chemicals, Inc., from Mr. Peter J. Ludzia, U.S. EPA, re: Sand, Gravel and Stone Site Final Feasibility Study - Phase II, 6/5/89. P. 306353-306356.
170. Letter to Mr. Peter J. Ludzia, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: EPA comments dated June 5, 1989 on the Draft Phase II Feasibility Study Report Dated April 13, 1989 for Maryland Sand, Gravel and Stone Site, 6/15/89. P. 306357-306362.
171. Report: Final Phase II Feasibility Study, Maryland Sand, Gravel and Stone Site, Elkton, Maryland, prepared by Dames & Moore, 6/21/89. P. 306363-306496. References are listed on P. 306479-306480 and P. 306486.
172. Letter to Mr. Peter Ludzia, U.S. EPA, from Mr. John C. Kittridge, Dames & Moore, re: Proposed changes to the Final Phase II Remedial Investigation, 7/12/89. P. 306497-306523.
173. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of the Environment, re: Final Phase II Remedial Investigation, 7/21/89. P. 306524-306524.

174. Memorandum to Mr. Peter J. Ludzia, U.S. EPA, from Dr. Roy L. Smith, U.S. EPA, re: Maryland Sand, Gravel & Stone triggers for on-site and off-site groundwater treatment, 7/26/89. P. 306525-306527.
175. Fax Sheet to Mr. Peter Ludzia, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of The Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements and a fact sheet, 7/31/89. P. 306528-306538. The Interim Guidance and a fact sheet are attached.
176. Fax Sheet to Mr. Peter Ludzia, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: Transmittal of the suggested language for Maryland Sand, Gravel & Stone Site Phase II Remedial Investigation and Feasibility Study Report, 8/2/89. P. 306539-306540.
177. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Maryland Department of the Environment, re: Transmittal of information on Applicable or Relevant and Appropriate Requirements for the Maryland Sand, Gravel and Stone Site, 8/4/89. P. 306541-306854. The following are attached:
- a) the Code of Maryland Sections 26.04.04.04 and 26.04.04.05;
  - b) the Code of Maryland Sections 26.04.04.10, 26.04.04.11 and 26.04.04.12;
  - c) the Code of Maryland Sections 26.04.04.06 and 26.04.04.07;
  - d) Title 26, Department of the Environment, Subtitle 08 Water Pollution;
  - e) Title 26, Department of the Environment, Subtitle 13 Disposal of Controlled Hazardous Substances;
  - f) Maryland State Department of the Environment Sections 10.18.02.01, 10.18.02.02 and 10.18.02.03;
  - g) Maryland State Department of the Environment Sections 10.18.01.02, 10.18.01.03, 10.18.01.04, 10.18.01.05, 10.18.01.06 and 10.18.01.07;

- h) Maryland State Department of the Environment  
Sections 10.18.06.01-10.18.06.15;
  - i) Maryland Department of Environment, Code of  
Maryland Regulations, 26.08.01-General.
178. Letter to Mr. Peter Ludzia, U.S. EPA, from Dr. Paul C. Krueger, The BOC Group, re: On-site and off-site groundwater remediation, 8/7/89. P. 306855-306856.
179. Report: Final Phase II Remedial Investigation, Maryland Sand, Gravel and Stone Site, Elkton, Maryland, Volume 1-Text, prepared by Dames & Moore, 9/1/89. P. 306857-307129. References are listed on P. 307121-307129.
180. Report: Final Phase II Remedial Investigation, Maryland Sand, Gravel and Stone Site, Elkton, Maryland, Volume 2-Appendices, prepared by Dames & Moore, 9/1/89. P. 307130-307481.
181. Letter to Dr. Paul Krueger, The BOC Group, from Mr. Peter J. Ludzia, U.S. EPA, re: Comments on the trigger mechanism for on-site and off-site groundwater remediation, 9/11/89. P. 307482-307485. A Summary of Major ARARs for Maryland Sand, Gravel and Stone Site is attached.
182. Letter to Dr. Paul Krueger, The BOC Group, from Mr. Peter J. Ludzia, U.S. EPA, re: Transmittal of a copy of the State of Maryland's August 4, 1989 letter, a copy of 40 CFR Part 6 Appendix A and a copy of the sampling results from off-site RW 1,2,3 and 10, 9/22/89. P. 307486-307490. Trace Organics Laboratory Volatile Organics Analysis for Sample Numbers RW-1-RW-3 and RW10 are attached.
183. Handwritten memorandum to Mr. Peter Ludzia, U.S. EPA, from Mr. Bill Cahill, Maryland Department of the Environment, re: Transmittal of the Code of Maryland Section 26.13.02 [.1 to .19], 10/5/89. P. 307491-307551. The section is attached.
184. Letter to Ms. Lydia Isales, U.S. EPA, from Mr. David C. Keehn, Air Products and Chemicals, Inc., re: Trigger mechanism directed by EPA, 10/6/89. P. 307552-307555. A Fax Sheet is attached.

185. Letter to Mr. David Keehn, Air Products and Chemicals, Inc., from Ms. Lydia Isales, U.S. EPA, re: Agreement on the trigger mechanism, 10/30/89. P. 307556-307558.
186. Routing and Transmittal Slip to Dr. Paul Krueger, The BOC Group, from Mr. Peter Ludzia, U.S. EPA, re: Transmittal of the Air Toxic Regulations, 11/3/89. P. 307559-307618. The regulations are attached.
187. Letter to Dr. Paul Krueger, The BOC Group, from Mr. Peter J. Ludzia, U.S. EPA, re: Additional set of regulations to be added to the listing of Applicable or Relevant and Appropriate Requirements (ARARs), 11/6/89. P. 307619-307619.
188. Letter to Ms. Lydia Isales, U.S. EPA, from Mr. David C. Keehn, Air Products, re: Transmittal of the Maryland Sand, Gravel and Stone Site, Operable Unit 2, Summary of ARARs Proposed by EPA, 11/22/89. P. 307620-307636. The summary is attached.
189. Letter to Mr. Paul Krueger, The BOC Group, Inc, from Mr. Peter Ludzia, U.S. EPA, re: ARAR's to be included in the Feasibility Study, 3/2/90. P. 307637-307643.
190. Transmittal letter to Mr. Peter Ludzia, U.S. EPA, from Mr. Paul Krueger, The BOC Group, re: Summary of ARAR's, 3/22/90. P. 307644-307657.
191. Letter to Mr. Paul Krueger, The BOC Group, from Mr. Peter Ludzia, U.S. EPA, re: Feasibility Study ARAR's, 4/2/90. P. 307658-307660. A transmittal sheet is attached.
192. Transmittal letter to Mr. Peter Ludzia, U.S. EPA, from Mr. Paul Krueger, The BOC Group, re: Summary of Alternative Compliance with ARAR's, 4/3/90. P. 307661-307662.
193. Report: Final Phase II Feasibility Study, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 4/6/90. P. 307663-307801.
194. Letter to Mr. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Department of the Environment, re: Confirmation of ARAR's, 4/6/90. P. 307802-307804.
195. Letter to Mr. Peter Ludzia, U.S. EPA, from Mr. John Kittridge, Dames & Moore, re: Transmittal of Appendix

B of the Phase II Feasibility Study, 4/9/90.  
P. 307805-307812. A letter regarding ARAR's and the  
new appendix B are attached.

196. Letter to Mr. Paul Krueger, The BOC Group, from Mr. Peter Ludzia, U.S. EPA, re: Mailing list for the proposed plan, 4/9/90. P. 307813-307813.
196. Letter to Ms. Laura Boornazian, U.S. EPA, from Mr. Frank Henderson, Virginia Department of the Environment, 4/15/90. P. 307814-307814.
197. Transmittal Sheet to Mr. Peter Ludzia, U.S. EPA, from Mr. Paul Krueger, The BOC Group, re: Transmittal of proposed changes to the Phase II ROD, 4/19/90. P. 307815-307819.
198. Report: Final Phase II Feasibility Study, Maryland Sand, Gravel and Stone Site, prepared by Dames & Moore, 5/9/90. P. 307820-307967.
199. Letter to Mr. Peter Ludzia, U.S. EPA, from Mr. David Keehn, Air Products, re: Changes to the alternative trigger level, 5/9/90. P. 307968-307975. A copy of a section of the Phase II report is attached.
200. Transmittal sheet to Ms. Lydia Isales, from Mr. David Keehn, Air Products, re: Risk threshold proposed change, 5/9/90. P. 307976-307978. Two letters regarding the change to the RI/FS.
201. Transmittal letter to Mr. Peter Ludzia, from Mr. Paul Krueger, The BOC Group, re: Changes to the risk level for the site's trigger mechanism, 5/10/90. P. 307979-307981.
202. Memorandum to Mr. Peter J. Ludzia, U.S. EPA, from Dr. Roy L. Smith, re: Risk in MSGS well samples from compounds other than 1,1-DCE and vinyl chloride, 5/23/90. P. 307982-307982.
203. Report: Proposed Plan: Maryland Sand, Gravel and Stone Site, Cecil County, Maryland, prepared by U.S. EPA, 5/90. P. 307983-307992.
204. Letter to Mr. Albert W. Peterson and Mr. Peter Ludzia, U.S. EPA, from Mr. David C. Keehn, Air Products and

Chemicals, Inc., re: Request for extension of comment period, 6/6/90. P. 307993-307993.

205. Letter to Mr. David C. Keehn, Air Products and Chemicals Group, from Mr. Peter Ludzia, U.S. EPA, re: Approval of extension of comment period, 6/21/90. P. 307994-307994.
206. Letter to Mr. Albert W. Peterson and Mr. Peter Ludzia, U.S. EPA, from Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher and Boylan, re: Request for extension of comment period, 6/29/90. P. 307995-307996.
207. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher and Boylan, from Mr. Thomas C. Voltaggio, U.S. EPA, re: Decision of EPA against a further comment period extension, 7/3/90. P. 307997-307998.
208. Letter to Mr. Michael Dore, Lowenstein, Sandler, Kohl, Fisher and Boylan, from Ms. Lydia Isales, U.S. EPA, re: Response to invocation of dispute resolution, 7/5/90. P. 307999-307999.
209. Letter to Mr. David Healy, Maryland Department of the Environment, from Mr. Peter Ludzia, U.S. EPA, re: Transmittal of ROD, 7/6/90. P. 308000-308000.
210. Report: Comments on RI/FS and Proposed Plan, addressed to Mr. Peter Ludzia, U.S. EPA, prepared by Mr. David C. Keehn and Mr. Michael Dore, 7/13/90. P. 308001-308132.
211. Letter to Mr. David Healy, Maryland Department of the Environment, from Mr. Peter J. Ludzia, U.S. EPA, re: Copy of comments dated July 13, 1990 regarding the Proposed Plan, 7/23/90. P. 308133-308133.
212. Record of Decision, Maryland Sand, Gravel and Stone Site - Operable Unit 2, Elkton, Maryland, 9/28/90. P. 308134-308210.
213. Letter to Ms. Lydia Isales, U.S. EPA, from Ms. Kathy M. Kinsey, Office of the Attorney General, re: Response to comments on the RI/FS and Proposed Plan, 9/10/90. P. 308211-308212.
214. Letter to Mr. Frank Henderson, Maryland Department of the Environment, from Mr. Peter J. Ludzia, U.S. EPA, re: Transmittal of ROD, 9/19/90. P. 308213-308213.



215. Letter to Mr. Thomas C. Voltaggio, U.S. EPA, from Mr. Ronald Nelson, Maryland Department of the Environment, re: Agreement of Hazardous and Solid Waste Management Administration with EPA's selection for remediation, 9/26/90. P. 308214-308215.

V. COMMUNITY INVOLVEMENT/CONGRESSIONAL CORRESPONDENCE/IMAGERY

1. Map of Locations of Surficial Soil Sampling Stations, Maryland Sand, Gravel and Stone (MSGS) Site, 1984. P. 500001-500001.
2. Map of Locations of Deep Monitoring Wells, MSGS Site, 1984. P. 500002-500002.
3. Map of Locations of Shallow Monitoring Wells, MSGS Site, 1984. P. 500003-500003.
4. Map of Locations of Waste Sampling Stations, MSGS Site, 1984. P. 500004-500004.
5. Map of Elkton, Maryland area, 1984. P. 500005-500005.
6. Map of Surface Water Drainage Pattern (offsite), Elkton, Maryland area. 1984. P. 500006-500006.
7. Map of Locations of Sediment Sampling Stations (offsite), Elkton, Maryland area, 1984. P. 500007-500007.
8. Map of Locations of Surface Water Sampling Stations (offsite), Elkton, Maryland area, 1984. P. 500008-500008.
9. Map of Locations of Surface Water Sampling Stations (onsite), MSGS Site, 6/4/84. P. 500009-500009.
10. Map of Locations of Surface Soil Sampling Stations, MSGS Site, 6/4/84. P. 500010-500010.
11. Map of Locations of Waste Sampling Stations, MSGS Site, 6/4/84. P. 500011-500011.
12. Map of Geophysical Study Grid area, MSGS Site, 6/4/84. P. 500012-500012.
13. Map of Locations of Sediment Sampling Stations (onsite), MSGS Site, 6/4/84. P. 500013-500013.
14. Map of the MSGS Site, Remedial Investigation/Feasibility Study (RI/FS), 3/19/85. P. 500014-500014.
15. Map of the MSGS Site, RI/FS, 3/19/85. P. 500015-500015.

16. Map of Inorganics at the MSGS Site, 3/19/85.  
P. 500016-500016.
17. Map of Volatiles at the MSGS Site, 3/19/85. P. 500017-500017.
18. Map of Semivolatiles at the MSGS Site, 3/19/85.  
P. 500018-500018.
19. Map of Location of On-Site Monitoring Wells and Residential Wells Sampled Near the Site, MSGS Site, 3/19/85. P. 500019-500020. Handwritten notes concerning semivolatile measurements are attached.
20. Maps of Location of On-Site Monitoring Wells and Residential Wells Sampled Near the Site, 3/19/85.  
P. 50021-500026.
21. Map of MSGS Site, 3/19/85. P. 500027-500027.
22. Maps of Surface Water and Sediment Sampling Locations, 3/19/85. P. 500028-500029.
23. Map of Surface Water Drainage in the Vicinity of the MSGS Site, 3/19/85. P. 500030-500030.
24. Map of Location of Sediment Sampling Station On-site, 3/19/85. P. 500031-500031.
25. Newspaper advertisement entitled, "United States Environmental Protection Agency invites Public Comment on the Proposed Plan for the Maryland Sand, Gravel and Stone Site, Elkton, Maryland," published in Cecil Whig, 7/2/90. P. 500032-500032.
26. Report: Public Meeting on the Proposed Plan for the Maryland Sand, Gravel and Stone Site, Elkton, Maryland, prepared by Delmarva Reporting, 6/5/90.  
P. 500033-500093.
27. Letter to Mr. Paul Krueger, The BOC Group, Inc., from Mr. Peter J. Ludzia, U.S. EPA, re: Transmittal of unedited transcript from public meeting held on June 5, 1990, 6/5/90. P. 500094-500095.
28. Advertisement entitled, "Maryland Sand, Gravel and Stone Advertisement," re: Extension of commentary period, published in Cecil Whig, 5/11/90.  
P. 500096-500096.

